

TITANIUM METALS CORP
 Form 4
 September 12, 2006

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
SIMMONS HAROLD C

 (Last) (First) (Middle)
THREE LINCOLN CENTRE, 5430
LBJ FREEWAY STE 1700

 (Street)
DALLAS, TX 75240-2697

 (City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
TITANIUM METALS CORP [TIE]

3. Date of Earliest Transaction
 (Month/Day/Year)
09/12/2006

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

 (Check all applicable)

Director 10% Owner
 Officer (give title below) Other (specify below)
Chairman of the Board & CEO

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
			Code	V	Amount	(D)	Price
Common Stock, \$.01 par value	09/11/2006		P		50,000	A	\$ 25
Common Stock, \$.01 par value					50,474,000	I	
Common Stock, \$.01 par value					6,127,000	I	
Common Stock, \$.01 par value					128,600	I	

by Tremont (1)

by Valhi (2)

by Spouse (3)

par value

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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(9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction (Instr. 6)
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
SIMMONS HAROLD C THREE LINCOLN CENTRE 5430 LBJ FREEWAY STE 1700 DALLAS, TX 75240-2697	X	X	Chairman of the Board & CEO	
Simmons Annette C 5430 LBJ FREEWAY, SUITE 1700 DALLAS, TX 75240		X		

Signatures

A. Andrew R. Louis, Attorney-in-fact, for Harold C. Simmons
09/12/2006

**Signature of Reporting Person

Date

A. Andrew R. Louis, Attorney-in-fact, for Annette C. Simmons
09/12/2006

**Signature of Reporting Person

Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Directly held by Tremont LLC. See the Additional Information filed as Exhibit 99 to this statement for a description of the relationship among the persons joining in this filing.
- (2) Directly held by Valhi, Inc. See the Additional Information filed as Exhibit 99 to this statement for a description of the relationship among the persons joining in this filing.
- (3) Directly held by Harold C. Simmons' spouse, Annette C. Simmons. Mr. Simmons disclaims beneficial ownership of any shares of the issuer's common stock that his spouse holds. Ms. Simmons disclaims beneficial ownership of any shares of the issuer's common stock that she does not hold directly. See the Additional Information filed as Exhibit 99 to this statement for a description of the relationships among the persons joining in this filing.

Remarks:

Exhibit Index

99 Additional Information

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.